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HS/XII/V/PF/PNP/Paper-V/24

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POULTRY NUTRITION AND PHYSIOLOGY

(Vocational Stream)

Full Marks : 45

Time : 2 hours

The figures in the margin indicate full marks for the questions

General Instructions :

- (i) Write all the answers in the Answer Script.
- (ii) Attempt Objective-type questions serially.
- (iii) Attempt all parts of a question together at one place.

1. Choose the correct answer from the options given below :

1×10=10

(a) Eggshell is formed in

- (i) ovary
- (ii) isthmus
- (iii) uterus
- (iv) cloaca

(b) Egg white is mainly composed of

- (i) carbohydrate
- (ii) protein
- (iii) fat
- (iv) calcium carbonate

(2)

(c) The shell membrane is formed in which part of oviduct?

(i) Infundibulum

(ii) Magnum

(iii) Isthmus

(iv) Uterus

(d) Yellow colour of yolk of 'Deshi egg' is due to the presence of

(i) vitamin A

(ii) vitamin E

(iii) carotene

(iv) riboflavin

(e) Chalaziferous layer of egg is a part of

(i) yolk

(ii) albumen

(iii) eggshell

(iv) shell membrane

(3)

(f) Expulsion of egg from the oviduct is known as

- (i) ovulation
- (ii) oviposition
- (iii) culling
- (iv) incubation

(g) How much fat is present in yolk?

- (i) 0%
- (ii) 17.5%
- (iii) 32.5%
- (iv) 48%

(h) How much protein is present in yolk?

- (i) 0%
- (ii) 17.5%
- (iii) 32.5%
- (iv) 48%

(4)

(i) What is the correct sequence of events in egg formation?

1. Oviposition
2. Ovulation
3. Shell formation
4. Shell membrane formation
5. Egg white formation

Select the correct answer from the codes given below :

- (i) 1, 2, 3, 4, 5
- (ii) 2, 5, 4, 1, 3
- (iii) 1, 5, 4, 3, 2
- (iv) 2, 5, 4, 3, 1

(j) A developing egg remains for specific time at each part of oviduct during egg formation as follows :

1. 20 hours 40 minutes at uterus
2. 1 hour 14 minutes at isthmus
3. 18 minutes in vagina
4. 2 hours 54 minutes at magnum

Select the correct answer from the codes given below :

- (i) 1, 2, 3 and 4 are correct
- (ii) 1, 2 and 3 are correct
- (iii) 1, 3 and 4 are correct
- (iv) 1, 2 and 4 are correct

(5)

2. Write True (T) or False (F) against each statement : 1×10=10

- (a) The crop is the bulging portion of the oesophagus.
- (b) Shell grit is offered to poultry (layer) to provide calcium in laying stage.
- (c) Calcium requirement of growing birds is more than laying birds.
- (d) Broiler finisher feed contains more proteins than broiler starter feed.
- (e) Pullorum disease may be spread through contaminated water.
- (f) ME (kcal/kg) requirement of layer feed is more than that of broiler feed.
- (g) The maximum salt (NaCl) content of poultry feed should be 0.6% (as per BIS specifications).
- (h) The minimum calcium content of layer ration should be 2% (as per BIS specifications).
- (i) Deoiled silkworm pupae meal is a rich source of limiting amino acids in poultry.
- (j) Feather meal is not very digestible unless cooked under pressure.

(6)

3. Fill in the blanks with appropriate words : 1×5=5

(a) To improve shell quality of egg _____ is to be added in the layer feed.

(b) Birds have no lips and _____, and hence cannot chew their feeds.

(c) Feeding alone costs about _____% of the total cost of poultry production.

(d) The very common method of poultry feeding in India is _____.

(e) Maize is _____ rich feed ingredient of poultry.

4. Describe the male reproductive system of a fowl with the help of a schematic diagram. 5

5. What is the importance of egg in human nutrition? 5

6. Classify poultry feed ingredients. Describe each ingredient briefly. 5

7. Describe the various methods of poultry feeding. 5

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